

What is claimed as the invention is:

1. An injection molded article having an electroluminescent panel as a first surface of the article, said panel comprising:
  - 5 a transparent first layer;
  - a first conductive layer overlying said first layer;
  - a second conductive layer,
  - a dielectric layer and a phosphor layer between said first conductive layer and said second conductive layer;
  - 10 a protective layer overlying the second conductive layer; and
  - a removable release layer overlying the protective layer to support the other layers during injection molding.
2. The article as set forth in claim 1 wherein said panel emits light outwardly  
15 from the surface.
3. The article as set forth in claim 1 wherein said panel emits light into said article.
- 20 4. The article as set forth in claim 1 wherein said outer surface is three dimensional.
5. The article as set forth in claim 1 wherein said transparent first layer and said protective layer are polyurethane.  
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6. The article as set forth in claim 1 and further including a hard coating layer underlying said transparent first layer.
7. The article as set forth in claim 1 and further including a UV curable resin  
30 underlying said transparent first layer.
8. The article as set forth in claim 1 and further including a graphics layer underlying said first transparent layer.

9. The article as set forth in claim 1 and further including a graphics layer adjacent a second surface of said article.

5        10. A method for making an article having a luminous surface, said method comprising the steps of:

              depositing a first translucent layer on a release layer;  
              depositing a first electrode on the first translucent layer;  
              depositing a phosphor layer or a dielectric layer on the first electrode;  
10        depositing a dielectric layer or a phosphor layer on the preceding layer;  
              depositing a second electrode on the preceding layer;  
              depositing a protective layer on the second electrode;  
              curing the deposited layers;  
              placing the release layer and cured layers in a mold with the release layer facing  
15        outwardly;  
              injecting resin into the mold behind the protective layer;  
              curing the resin;  
              removing the article from the mold; and  
              removing the release layer.

20        11. The method as set forth in claim 10 wherein at least one of the depositing steps is the step of screen printing.

              12. The method as set forth in claim 10 wherein at least one of the depositing  
25        steps is roll coating.

              13. The method as set forth in claim 10 wherein the protective layer is UV curable resin and the curing step includes the step of irradiating the protective layer with UV radiation.

30        14. The method as set forth in claim 10 wherein the curing step is performed after each depositing step.

15. The method as set forth in claim 10 and further including the step of:  
placing a graphics layer in said mold, separated from said release layer.

16. The method as set forth in claim 15 wherein said injecting step includes  
5 the step of injecting resin at least between said protective layer and said graphics  
layer.

17. An instrument cluster having at least one electroluminescent lamp as a  
first surface of the cluster, said lamp comprising:  
10 a transparent first layer;  
a first conductive layer overlying said first layer;  
a second conductive layer,  
a dielectric layer and a phosphor layer between said first conductive layer and  
said second conductive layer;  
15 a protective layer overlying the second conductive layer; and  
a removable release layer overlying the protective layer to support the other  
layers during injection molding.

18. The instrument cluster as set forth in claim 17 and further including a  
20 plurality of electroluminescent lamps, wherein at least some of the lamps include a  
graphics layer.

19. A cellular telephone having an electroluminescent lamp as a first surface of  
the telephone, said panel comprising:  
25 a transparent first layer;  
a first conductive layer overlying said first layer;  
a second conductive layer,  
a dielectric layer and a phosphor layer between said first conductive layer and  
said second conductive layer;  
30 a protective layer overlying the second conductive layer; and  
a removable release layer overlying the protective layer to support the other  
layers during injection molding.

20. A method for making an article having a luminous surface, said method comprising the steps of:

- depositing a first translucent layer on a release layer;
- depositing a first electrode on the first translucent layer;
- 5 depositing a phosphor layer or a dielectric layer on the first electrode;
- depositing a dielectric layer or a phosphor layer on the preceding layer;
- depositing a second electrode on the preceding layer;
- depositing a protective layer on the second electrode;
- curing the deposited layers;
- 10 removing the release layer;
- placing the cured layers in a mold;
- injecting resin into the mold behind the cured layers;
- curing the resin;
- removing the article from the mold.

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21. The method as set forth in claim 20 and further including the step of:  
vacuum forming the cured layers prior to injecting resin into the mold.